

RECOVERY PROGRAM DIRECTOR'S UPDATE

April 2003

Population Estimates: Numbers reflect the best currently available point estimates of the mean number of wild adults.

SPECIES	RIVER		
	MIDDLE GREEN ¹	LOWER GREEN ²	COLORADO
Colorado pikeminnow	About 3,500, based on data collected in 2000. Estimates are continuing in 2003.	Population estimates initiated in 2001; data being analyzed and estimates continuing in 2003.	About 700, based on data collected in 2000.
	SAN JUAN RIVER: Estimate of about 20 adults was given in 2002 from data		
Humpback chub	<u>Yampa Canyon:</u> Population small, about 400, based on model using 1998-2000 data. Effort is being expanded in 2003 to develop a more precise estimate.	<u>Desolation/Gray Canyon:</u> Estimates for 2001 and 2002 were 1,500 and 1,700, respectively.	<u>Black Rocks Canyon:</u> About 1,000. <u>Westwater Canyon:</u> 2,200–4,700 based on 3 sampling sites in 1998–2000; effort is being expanded in 2003. <u>Cataract Canyon:</u> About 500; a mark-recapture will be investigated in 2003 (this effort was scheduled to begin in 2002 but was postponed due to low flows). <u>Grand Canyon:</u> Between 2,000 and 4,000. Efforts are underway to improve this estimate.

Population Estimates, Continued.

SPECIES	RIVER		
	MIDDLE GREEN ¹	LOWER GREEN ²	COLORADO
Razorback sucker	<100 wild adults; population being augmented through stocking; augmentation is being expanded with excess fish stocked into selected floodplain depressions; stocked fish are returning to spawning bar; monitoring and evaluation of stocked fish in 2003–2004 being accomplished through sampling conducted for population estimates and nonnative fish control.	Few adults; population being augmented through stocking; monitoring and evaluation of stocked fish in 2003–2004 being accomplished through sampling conducted for population estimates and nonnative fish control.	Few adults; population being augmented through stocking; monitoring and evaluation of stocked fish in 2003–2004 being accomplished through sampling conducted for population estimates and nonnative fish control
	SAN JUAN RIVER: No estimate of adults is available, although larval razorback		
Bonytail	Populations are currently being re-introduced in Colorado, lower Green, middle Green and Yampa rivers; augmentation is being expanded with excess fish stocked into selected floodplain depressions; survival of stocked fish observed; monitoring and evaluation of stocked fish in 2003–2004 being accomplished through sampling conducted for population estimates and nonnative fish control.		

¹Middle Green River includes the Yampa River (Craig to Echo Park), White River (Taylor Dam to Green River confluence), and mainstem Green River (Split Mountain to Sand Wash)

²Lower Green River includes Desolation/Gray canyons (Sand Wash to Green River City), and the lower mainstem (Green River City to Colorado River confluence).

Regions 6 and 2 of the Fish and Wildlife Service are collaborating to ensure a coordinated effort to achieve recovery goals in both the upper (including the San Juan) and lower basins. Several meetings have been held and more are scheduled. Tom Czaplá of the Program Director’s Office has been working actively with various entities of the Glen Canyon Dam Adaptive Management Work Group to help focus recovery actions for humpback chub in the Grand Canyon.

I. Instream Flow Identification and Protection

Goal: To protect sufficient instream flows to support self-sustaining populations of the endangered fishes.

Status:

- Due to drought, flows in the 15-Mile Reach of the Colorado River were targeted for 80-100 cfs from July 10 through mid-September of 2002. A total of 15,072 af of water was released to support late summer target flows. This total included 0 af from Green Mountain, 10,975 af from Ruedi, 309 af from Wolford and 3,788 af from

Williams Fork Reservoir. (15,825 af was available from Ruedi for the endangered fish, but when September rains increased flows, 4,850 af of Ruedi water was saved in order to build 2003 storage).

- The Service has revised the report *Flow Recommendations to Benefit Endangered Fishes in the Colorado and Gunnison Rivers* based on Biology Committee recommendations. The Service sent the revised report back to the Biology Committee for review on April 1, 2003.
- With the programmatic biological opinion (PBO) process for the Gunnison River on hold, water users have been discussing a range of options for ESA compliance on the Gunnison River. Options include: 1) no PBO, but project-by-project consultation; 2) a PBO on existing depletions (thus avoiding argument over whether there will be future transbasin diversions); or 3) a PBO on existing and future depletions (~50,000 af of future in-basin needs). Water users have discussed these options and identified a number of issues, including future depletions and east slope water use and ESA compliance for the Dolores Project, whose current reasonable and prudent alternative refers to releases from an upstream reservoir (Aspinall, although it wasn't named in the opinion). The Gunnison water users hope to meet with Reclamation in May to discuss the options and issues, how they would affect other federal projects in the basin, etc.
- No Coordinated Reservoir Operations (CROS) are anticipated in 2003 because reservoirs are at record lows and operators will be using all available water to refill reservoirs. An unprecedented agreement was recently reached out between Xcel Energy, Denver Water and west slope water users to relax the Shoshone call from 1200 cfs to 700 cfs so that reservoirs in the upper basin can store additional water to recover from the 2002 drought. Natural peaks could boost flows above the desired 12,900 cfs threshold at Palisade in 2003, which would help restore habitat function in the 15-mile reach.
- The Coordinated Facilities Operations Project (CFOPS) was initiated in 1999 to investigate alternatives for supplying up to an additional average annual 20,000 acre-feet of water to the 15-Mile Reach of the Colorado River. A secondary purpose is to enhance flows in the 15-Mile Reach during late summer and fall. Phase I of this project examined a wide range of possible alternatives that were subjected to a preliminary screening process to arrive at a short list of alternatives to be intensively studied in Phase II. The final report on Phase I was completed in September 2000. The Phase II modeling has been completed and recommendations drafted by the Executive Committee. The Water Acquisition Committee will review the report and the Executive Committee recommendations, and a final report is expected in April 2003. Both short and long-term alternative solutions will be proposed. Short-term solutions that would incorporate flexible real-time management (e.g., provisions to allow building up storage in an average or wetter year after several years of drought) are being discussed. Construction of additional storage may be part of the long-term proposal.

- Grand Valley Water Management facilities enabled Reclamation to reduce diversions and conserve up to 1,400 acre-feet per day in the 2002 irrigation season. This primarily benefitted water users by allowing them to conserve stored water for later use in this drought year. In average water years, the improved efficiency will provide about 28,000 af of additional water for endangered fish. Agreement was reached in February 2003 on appraised value of storage space in Highline Lake in order to complete pumping plant facility there (a component of GVWM which will allow optimum use of Grand Valley Project water).
- The Flaming Gorge EIS Interdisciplinary Team is preparing the draft EIS, which it expects to publish in June 2003. The comment period will end in late August. The target date for publication of the final EIS is December 2003, and for the Record of Decision, January 2004.
- Yampa River Management Plan and PBO:

A revised draft of the Yampa management plan and first draft environmental assessment (EA) have been submitted to the Regional Solicitor (SOL) for review. The EA, which incorporates a biological assessment, also has been submitted to the FWS ES Office in Grand Junction for review, prior to initiating formal Section 7 consultation. Upon SOL approval, a Notice of Availability (NOA) will be published in the Federal Register, after which a 30-day comment period will follow. Within the comment period, three public meetings have been scheduled in the Yampa Basin. They are scheduled from 7–9 p.m. in Steamboat Springs, Baggs, and Craig, on May 19, 20 and 21, respectively. After the comment period closes, the EA will be finalized. The final plan and EA are expected by the end of August, with the PBO in roughly the same time frame. A Cooperative Agreement should be signed before the end of the fiscal year.
- Permitting and design for Elkhead enlargement are on schedule and the Colorado River Water Conservancy District plans to award a contract for next January.
- Flow recommendations reports for the Duchesne and White rivers are in the review and revision process. Final reports are expected late this summer.
- The Program is developing a strategic plan to prioritize and direct future habitat research and monitoring activities to direct future research toward meeting the recovery goals of the fishes. Argonne National Laboratory has conducted two meetings of biologists and geomorphologists in December 2002 to assess the state of our knowledge, both in terms of physical processes and biological requirements and identify data gaps. Argonne submitted a draft strategic plan to the Program Director for review on March 31, 2003. The draft plan will be sent out for Biology Committee and peer review by April 14 and a final plan is anticipated in June.
- From the Program's inception in 1988 through December 31, 2002, the Service has consulted on 148 projects with a potential to deplete a total of 1,720,560 af in the Upper Colorado River Basin, of which 1,495,125 af are historic depletions. Three

of these "projects" are blanket consultations for depletions under 100 af, up to 7,500 af total. Thus far, these three consultations have covered 434 actual projects depleting a total of 6,194 af (4,345 af in Colorado, 1050 in Utah, and 799 af in Wyoming). Another of these 146 "projects" is the 15-Mile Reach PBO which covers an average depletion of up to 1 million acre-feet per year of existing depletions (through September 30, 1995) and up to 120,000 acre-feet of new depletions (since September 30, 1995) in the Colorado River above the confluence with the Gunnison River. Thus far, the 15-Mile Reach PBO has covered 129 actual projects. (And a total of 49 recovery agreements have been signed under the PBO). In total, then, since January 1988, the Service has consulted on 707 projects depleting water from the upper Colorado River basin.

- The FWS continues to waive charges for water projects that deplete fewer than 100 acre-feet of water per year. This arrangement has simplified the section 7 consultation process for many water projects in the upper basin.
- The Service is drafting an amendment to the 15-Mile Reach PBO PBO that would eliminate the requirement for projects depleting less than 10 af (average annual depletion) to sign a recovery agreement.

II. Habitat Restoration

Goal: To provide or enhance habitat for the rare fishes through habitat development or management measures such as:

- fish passageways
- screens to prevent fish entrainment into diversion canals
- restoration of floodplain and instream habitats.

Status: • The fish ladder at the Redlands Diversion Dam on the Gunnison River has been operational since June 1996. The ladder has been used by 48,000 native fishes (versus 5,600 nonnative fishes), including 59 Colorado pikeminnow and six previously-stocked razorback suckers. Six of the Colorado pikeminnow have used the ladder twice; one has used it three times. Native fishes that were marked and released above the dam dispersed upstream, some as far as 57 river miles to the base of the Hartland Diversion Dam. A fish screen will be installed at Redlands during FY05 to prevent entrainment of endangered fishes into the diversion canal. Discussions are underway to conduct an intra-Service consultation to provide incidental take coverage for Redlands operations.

- A fish passage structure was constructed at the Grand Valley Irrigation Company Diversion Dam on the Colorado River in January 1998. Ten adult Colorado pikeminnow were captured above the GVIC dam between August 19 and September 24, 1998. Providing fish passage at this structure, Price-Stubbs, and the Grand Valley Project Diversion Dam will restore 56 miles of historically-occupied habitat for endangered fishes. A fish screen on the canal was completed in March 2002 and operated through early June when drought-year flows became too low to

effectively operate the screen facility. Other operational and maintenance difficulties are being addressed.

- Construction to restore fish passage at the Price-Stubb Diversion Dam was tentatively scheduled to begin in the fall of 1998. However, complex issues (e.g., potential effects of passage restoration on railroad, highway, Reclamation's siphon, and Ute pumping; ownership of property and FERC license) have caused delays. Reclamation recently released a draft EA for the rock ramp alternative. The public comment deadline was September 23. Construction is now scheduled for FY04–05. A fish screen will not be necessary because water has not been diverted at this site since 1919.
- Preconstruction activities are ongoing through FY 2002 to restore fish passage at the Grand Valley Project Diversion Dam. Construction is scheduled for FY04–05. Installation of a fish screen is scheduled for FY03–04.
- Design options have been developed for a fish screen at the Tusher Wash Diversion canal on the Green River in Utah. Screen construction cannot begin until a water-rights dispute has been settled; but settlement appears imminent. Construction has been postponed until FY07.
- Restoration of passage and installation of a fish screen at the Hartland Diversion Dam on the Gunnison River is on hold pending reassessment of the need for passage this far up the Gunnison River and assessment of the feasibility of warming releases from the Aspinall Unit. If passage and screen are deemed warranted, passage is tentatively scheduled for FY07 and screen for FY06.
- The Recovery Program sponsored a workshop in November 2001 to review the habitat restoration program. Subbasin and site-specific floodplain management plans are now being developed to provide clear objectives, costs, and measures of success. A razorback sucker habitat model to estimate the quantity of habitat needed for recovery is in the final stages of development.
- Floodplain habitat has been restored at five Bureau of Land Management sites on the Green River, three sites at Ouray National Wildlife Refuge, two sites on the Colorado River near Grand Junction, and the Escalante State Wildlife Area on the Gunnison River. The Recovery Program has acquired 997.2 acres of floodplain/wetland habitat along the Green, Colorado, and Gunnison rivers.
 - Negotiations are underway to acquire an easement on Thunder Ranch wetlands, located 6 miles downstream from the Green River razorback spawning bar.
- Razorback sucker survival and growth in floodplain wetlands - Razorback sucker and bonytail larvae were stocked into the Stirrup wetland in April 2002, with nonnative fish species composition/abundance representative of a recently reset

(dried up) and newly inundated wetland. By August 13, 2002, larval survival ranged from 0.4% to 1.9%, average length ranged from 2 inches to 3.7 inches.

III. Nonnative Fishes and Sportfishing

Goal: Minimize the impacts of nonnative fishes and incidental take associated with sport fishing on the endangered fishes.

Status: • New control efforts are scheduled to begin in FY 03 to remove channel catfish and smallmouth bass from the Yampa and Duchesne rivers; and channel catfish from the Colorado and Green rivers. FY 03 work will follow a treatment/control research approach to evaluate effectiveness in depleting the target nonnative fishes. Evaluation of response of the native fish community to nonnative fish control activities will begin in FY 04.

- Efforts to remove northern pike from the Yampa River and translocate these fish to off-channel ponds to provide sportfishing opportunities continue to be successful. In 2002, 538 northern pike were removed from the Yampa, and most were transferred to nearby public fishing areas. Biologists also removed 42 northern pike from the Green River in Utah.
- To date, the Utah Division of Wildlife Resources, Colorado Division of Wildlife, and the Fish and Wildlife Service have removed more than 27,300 channel catfish; 23,800 nonnative centrarchids; and 319,500 nonnative cyprinids from rivers in the Upper Colorado River Basin.
- Construction of Elders Pond was completed on September 19, 2002. Fish screen construction is underway, expected to be completed by October 10th. The pond will be filled during spring 2003, and fish will be stocked when Vernal CRFP and UDWR conducts their nonnative fish removal work between April and June 2003.
- The Ute Indian Tribe, Uintah and Ouray Agency, has verbally agreed to the Nonnative Fish Stocking Procedures.

IV. Propagation Activities

Goal: • Produce a sufficient supply of hatchery-reared fish to support research and recovery activities.
• Conserve the genetic diversity present in the wild.

Status: • The table on the following page identifies the species to be stocked through early October 2003.

- State stocking plans were integrated into an overall Program plan to establish at least 2 populations of razorback sucker and bonytail in the Upper Colorado River Basin. Augmentations in portions of habitat currently unavailable to Colorado pikeminnow were also included in the integrated plan.

- The Program's four hatchery facilities are reducing the number of fish on hand to meet the requirements of the integrated stocking plan. Requests for bonytail and Colorado pikeminnow larvae have been made to Dexter National Fish Hatchery and Technical Center.

Stocking Status: Below are the species, numbers, and sizes of fish expected to be stocked during 2003 into various river reaches to meet the integrated stocking plan for the Upper Colorado River Endangered Fishes Recovery Program. Numbers meet or exceed requirements of the integrated stocking plan.

Species	River Section	Number Time (Hatchery)	Size (inches)
Bonytail	Green (Middle)	~12,000 Fall (Mumma) ~2,700 Summer-Fall (Wahweap)	> 8
	Green (Lower)	~5,300 Summer-Fall (Wahweap)	> 8
	Colorado (Colorado)	1,000-1,500 Spring (Mumma) ~12,000 Fall (Mumma)	> 8
	Colorado (Utah)	~2,700 Summer-Fall (Wahweap)	> 8
Razorback sucker	Green (Middle)	~8,000 Spring (Ouray) ~1,900 Summer-Fall (Ouray)	12
	Green (Lower)	~4,900 Fall (Ouray) ~4,900 Summer-Fall (Grand Junction)	>12
	Colorado (Colorado)	~9,900 Summer-Fall (Grand Junction)	>12
Colorado pikeminnow	Colorado (Colorado)	~2,250 Summer-Fall (Grand Junction)	>6

V. Research, Monitoring, and Data Management

Goal: To support recovery activity, monitor endangered fish status and trends, and maintain Recovery Program data archives.

- Status:**
- The Larval Fish Laboratory verified eight larval razorback sucker from samples collected this spring in the Gunnison River. Since razorback sucker have been extirpated from the Gunnison, and stocking efforts there have occurred since 1996, these larval razorback sucker are the product of hatchery-reared fish.
 - Mark-recapture population estimates are underway to determine progress toward achieving recovery goals. Last year, data were collected on humpback chub in Desolation/Gray Canyons and Colorado pikeminnow in the Green River. Flows were too low to allow data collection on humpback chub in Cataract Canyon. This year population estimate data is scheduled to be collected for Colorado pikeminnow in the upper Colorado, Green, and Yampa rivers and for humpback chub in Desolation/Gray Canyon on the Green River, in Yampa Canyon, and in Cataract Canyon, Black Rocks, and Westwater on the Colorado River. Final reports on several previous population estimates have recently been completed (Colorado pikeminnow in the upper Colorado River, humpback chub in the Yampa River, and humpback chub in Black Rocks), are nearing completion (humpback chub in Westwater,), or are being drafted (Colorado pikeminnow in the Green and Yampa rivers).

VI. Public Involvement, Information, and Education

Goal: To promote public understanding, appreciation, and support for efforts to recover the endangered fish.

Status:

- News Media: A news media campaign is planned for April, May and June to announce nonnative fish management work that will occur this spring and summer. A news release will also be distributed to seek public comment on the Yampa River Management Plan. The State of Colorado plans to seek news media coverage of students on the western slope releasing razorback sucker into the wild as part of the Colorado Division of Wildlife's Aquariums in the Schools project. News clips are faxed routinely to the I&E Committee, interested Management Committee members, and anyone else upon request.

- A comprehensive communications strategy is being implemented to support expanded nonnative fish management actions. The plan calls for active participation and cooperation by the States of Colorado and Utah, the Fish and Wildlife Service and Colorado State University. Other program partners should also be familiar with this effort and provide support and assistance as appropriate.
- *Program Highlights 2002-2003* for the Upper Colorado and San Juan River Recovery Programs was produced for the annual Washington, D.C., briefing trip. The publication was also distributed to all Recovery Program committee members and interested parties and to members of the Yampa River Basin Partnership, and the Gunnison and Colorado River PBO planning groups.
 - The Utah Division of Wildlife Resources and the Fish and Wildlife Service staffed the Recovery Program's exhibit at the Utah Water Users Association's annual workshop in St. George, Utah, in March.
- Interpretive Exhibits: Vendor proposals are being reviewed to produce six interpretive signs that will be installed along the Colorado Riverfront Trail in Grand Junction later this year. A memorandum of understanding needs to be prepared between the Recovery Program and the City of Grand Junction to address maintenance of the site.
- The Montrose Pavilion in Gunnison has an aquarium in its lobby displaying razorback sucker, Colorado pikeminnow and bonytail. An aquarium at The Nature Conservancy's Carpenter Ranch is in place. The Recovery Program is working with Dinosaur National Monument to establish an aquarium at the quarry that will feature razorback sucker and bonytail.
- An information kiosk at the Ouray National Fish Hatchery is slated for completion in early May.

• One Recovery Program freestanding exhibit is on semi-permanent display at the Museum of Western Colorado.

VII. Recovery Program Management

Goal: To ensure effective implementation and coordination of the Recovery Program.

- Status:
- Extension of authorization authority for project construction for both the Upper Basin and San Juan recovery programs was passed and signed into law by the President on December 19, 2002 (P.L. 107-375).
 - The Implementation Committee expects Dan Luecke will soon represent the environmental groups once again. Dan will work as a consultant for the Land and Water Fund of the Rockies. The Nature Conservancy and the Land and Water Fund plan to submit resolutions of support for the Recovery Program soon.

- The National Fish and Wildlife Foundation is closing its Rocky Mountain office and administration of their Colorado River program work will be transferred to their Sacramento office.
- The Program's electronic listserver has 187 subscribers and is one of two key components of the Program's electronic communication. All Program participants are strongly urged to subscribe. The Program participants' web site (<http://www.r6.fws.gov/crrip/>) has detailed Program information such as upcoming meeting dates and times; meeting agendas and summaries; a bibliography of the Program library; the RIPRAP; and numerous other Program documents. The site is regularly updated and expanded.
- Development of the Program's FY 2004/2005 work plan is underway. The Program Director's office provided draft Program guidance in February, and it was finalized based on committee comments on April 9.